



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-----------------------------------|------------------|
| 10/594,255 | 08/18/2008 | Keiichi Kitahara | 5048/76889 | 1870 |
| 23432 7590 04/02/2009 COOPER & DUNHAM, LLP 30 Rockefeller Plaza 20th Floor NEW YORK, NY 10112 | | | EXAMINER ROBINSON, ELIZABETH A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1794 | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 04/02/2009 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/594,255

Applicant(s)

KITAHARA ET AL.

Examiner

Elizabeth Robinson

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-7 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SE-US)
Paper No(s)/Mail Date 9-25-2006
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 2, it is unclear if the stated weight percentage limitations are for the cured or uncured layer. Since the coating mixture can include solvents, the weight percentages for the cured and uncured composition would be different. All other claims depend from claim 1 and thus, are rendered indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onozawa et al. (US 6,103,370), in view of Nakamura et al. (US 2002/0085284).

Regarding claim 1, Onozawa (Column 1, lines 43-50) teaches a hard coat sheet comprising a base sheet and a coat layer. The base sheet (Column 2, lines 8-12) can be a plastic film. The film can be a glare preventing film for a computer display (Column

1, lines 6-14). The coat layer can comprise an ultraviolet absorbent (Column 3, lines 44-50). The resin of the coat layer can be cured by electron beam or ultraviolet radiation (ionizing radiation). The coat layer can also comprise a filler, such as silica or acrylic powder, to provide an anti-glare property (Column 3, lines 19-28). The filler is present at 0.5 to 50 parts per 100 parts by weight of the acrylate resin. Since the acrylate resin can be the primary component of the coating (Example 1), the weight percentage limitation for the filler meets the limitation for the microparticles.

Onozawa does not teach the size or preferred shape of the filler.

Nakamura (Paragraph 9) teaches an anti-glare film for use on an image display device. The binder of the anti-glare layer is formed from the ionizing radiation curable resins (Paragraph 43), including the same types of resins (Paragraph 42) as in Onozawa. The matting agent particles for the anti-glare layer include silica particles and cross-linked acrylic particles (Paragraph 59). The preferred shape of the matting agent is spherical, in order to obtain a consistent anti-glare property (Paragraph 60). The size of the matting particles is from 1 to 5 microns (Paragraph 57), in order to have a sufficient degree of anti-glare behavior, while still maintaining a sharp transmission.

It would be obvious to one of ordinary skill in the art to use the size and shape anti-glare particles of Nakamura, as the anti-glare particles of Onozawa, in order to form an anti-glare layer having a consistent anti-glare property with a sufficient degree of anti-glare behavior, while still maintaining a sharp transmission.

Regarding claim 2, Onozawa (Column 2, lines 35-62) teaches that the resin of the coat layer can also comprise 0.1 to 100 parts by weight of an organopolysiloxane based on 100 parts by weight of the acrylate resin.

Regarding claims 3 and 5, Onozawa (Column 3, lines 61-62) teaches that the coat layer preferably has a thickness from 1 to 10 microns. Since this thickness includes thicknesses smaller than the particle size, the limitation is met. Further, Nakamura (Paragraphs 48 and 49) teaches that the desired internal scattering of the anti-glare layer can be imparted by having the matting particles size larger than the layer thickness.

Claims 4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onozawa et al. (US 6,103,370), in view of Nakamura et al. (US 2002/0085284) as applied to claims 1-3 above, and further in view of the Ciba® TINUVIN® 328 and 1130 product literature.

As stated above, the sheet of Onozawa, using the particle size and shape of Nakamura, meets the limitations of claims 1-3. Onozawa (Column 3, lines 44-50) teaches that ultraviolet absorbers can be added to the coat layer and uses one example absorber, TINUVIN® 1130 in the examples, but does not preclude using a different ultraviolet absorber.

As shown in the TINUVIN® 1130 product literature, TINUVIN® 1130 has a molecular weight of 637.

The TINUVIN® 328 product literature shows that TINUVIN® 328 has a molecular weight of 351.5. As shown by the transmittance spectrum of the two ultraviolet absorbers, TINUVIN® 328 has a lower transmittance in the ultraviolet spectrum than does TINUVIN® 1130 for the same loading. Thus, TINUVIN® 328 will be a more effective ultraviolet absorber than TINUVIN® 1130.

It would be obvious to one of ordinary skill in the art to use TINUVIN® 328 as the ultraviolet absorbers for the sheet of Onozawa, in order to have a more effective ultraviolet absorber than the example absorber.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Robinson whose telephone number is (571)272-7129. The examiner can normally be reached on Monday- Friday 8 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. R./
Elizabeth Robinson
Examiner, Art Unit 1794

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art
Unit 1794

March 25, 2009